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applicants traverse the rejections and believe that the claims are not made obvious in view the prior art of record. Applicants' claimed invention requires a "memory for storing information about an **offset for converting gray level coordinates of a gamma characteristic** spaced evenly according to said number of bits into gray level coordinates spaced unevenly" Applicants' claimed invention further requires "a gray level adjustment portion for performing a calculation on particular input sub-pixel data based on information about said offset stored in said memory". Applicants' claimed invention also requires, in combination, "a pseudo-gray-level-expansion portion for applying pseudo gray level expansion to said sub-pixel data calculated by said gray level adjustment portion, wherein said sub-pixel data to which the pseudo gray level expansion is applied by said pseudo-gray-level-expansion portion is supplied to said liquid crystal driver to display the image on said liquid crystal cell."

In addition, applicants' claimed invention requires "a liquid crystal driver for supplying a voltage to said liquid crystal cell based on a gray level of said plurality of sub-pixels output from said controller **without varying the liquid crystal transmittance for a particular gray level** among said plurality of sub-pixels, wherein said controller assumes a characteristic for the particular subpixel in which no multiple of the brightness level of any intermediate gray level is identical to the brightness level of any intermediate gray level of another sub-pixel and selecting a gray revel which provides desired brightness from within said characteristic."

Applicants' claimed invention further requires "memory for storing information about an **offset for converting gray level coordinates of a gamma characteristic** spaced evenly according to the number of bits of said liquid crystal driver into gray level coordinates spaced unevenly".

Applicants agree with the Examiner regarding what Tjandrasuwita fails to teach or suggest in addition to the above claimed features of applicants' claimed invention. Tjandrasuwita teaches that the tile memory 402 does not store "information about an **offset for converting gray level coordinates of a gamma characteristic** spaced evenly

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according to said number of bits into gray level coordinates spaced unevenly." To the contrary, the tile memory only stores "pixel mapping data" (see column 9, lines 43 – 62) versus the offset reference found in Figure 6 of Tjandrasuwita. Tjandrasuwita uses offset circuits 601, 602 and 604 for supplying offset info to the adder circuit 603. Tjandrasuwita further fails to disclose any system or method for dealing gamma characters, for performing a gray level adjustment based on information about an offset stored as required by applicants' claims.

Tjandrasuwita still further fails to teach or suggest "a liquid crystal driver for supplying a voltage to said liquid crystal cell based on a gray level of said plurality of sub-pixels output from said controller **without varying the liquid crystal transmittance for a particular gray level** among said plurality of sub-pixels, wherein said controller assumes a characteristic for the particular subpixel in which no multiple of the brightness level of any intermediate gray level is identical to the brightness level of any intermediate gray level of another sub-pixel and selecting a gray revel which provides desired brightness from within said characteristic."

The patent to Kim fails to solve the deficiencies of Tjandrasuwita. Namely, Kim fails to disclose any system or method for dealing gamma characters, for performing a gray level adjustment based on information about an offset stored as required by applicants' claims. What Kim does teach is a basic use of gamma characters, but the specifics of applicants' claimed invention.

Kim further fails to teach or suggest "a liquid crystal driver for supplying a voltage to said liquid crystal cell based on a gray level of said plurality of sub-pixels output from said controller **without varying the liquid crystal transmittance for a particular gray level** among said plurality of sub-pixels, wherein said controller assumes a characteristic for the particular subpixel in which no multiple of the brightness level of any intermediate gray level is identical to the brightness level of any intermediate gray level of another sub-pixel and selecting a gray revel which provides desired brightness

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from within said characteristic." What Kim does teach is that the transmittance changes with any variance of the voltage, see Figure 6 of Kim.

The patent to Larkin et al also fails to solve the deficiencies of Tjandrasuwita or Kim. Namely, Larkin et al fails to disclose or suggest any system or method for dealing gamma characters, for performing a gray level adjustment based on information about an offset stored as required by applicants' claims. Like Kim, Larkin et al what teach is a basic use of gamma characters, but the specifics of applicants' claimed invention.

Larkin et al fails to disclose or suggest a "memory for storing information about an **offset for converting gray level coordinates of a gamma characteristic** spaced evenly according to the number of bits of said liquid crystal driver into gray level coordinates spaced unevenly".

Larkin et al further fails to disclose or suggest a liquid crystal driver for supplying a voltage to said liquid crystal cell based on a gray level of said plurality of sub-pixels output from said controller **without varying the liquid crystal transmittance for a particular gray level** among said plurality of sub-pixels, wherein said controller assumes a characteristic for the particular subpixel in which no multiple of the brightness level of any intermediate gray level is identical to the brightness level of any intermediate gray level of another sub-pixel and selecting a gray revel which provides desired brightness from within said characteristic."

Therefore, it would not have been obvious to one of ordinary skill in the art to combine or modify the teachings of the either Tjandrasuwita in view of Kim '633, Tjandrasuwita in view of Larkin et al or Tjandrasuwita and Larkin et al in view of Kim to make applicants claimed invention.

Applicants notes the prior art cited but not applied by the Examiner and agrees that they do not disclose or make obvious the claimed invention.

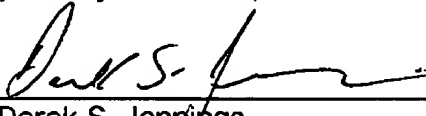Serial No. 09/681,534   4

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In view of the remarks herein, applicants believe that the application is now condition for allowance and respectfully request the Examiner to reconsider and allow the above-identified application. If the Examiner wishes to discuss the application further, or if additional information would be required, the undersigned will cooperate fully to assist in the prosecution of this application.

Please charge any fee necessary to enter this paper and any previous paper to deposit account 09-0468.

In the event that this amendment does not result in allowance of all such claims, the undersigned respectfully requests a telephone interview at the Examiner's earliest convenience.

Respectfully submitted,

By: _____

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